## **ABSTRACT**

The present invention relates to a method of increasing the number and/or differentiation of neural stem cells and/or neural stem cell progeny using pituitary adenylate cyclase-activating polypeptide (PACAP). In a preferred embodiment, additional growth factors are also utilized. The present invention can be practiced *in vivo* and *in vitro*, rendering it useful for the treatment of neurodegenerative disease and other neural trauma.